

WHAT IS CLAIMED IS:

1. An apparatus for positioning a sunroof with a vehicle body, comprising:
 - a base member mounted to a running rail, the base member movable along and vertically to the running rail;
 - 5 a floating plate mounted to the base member, interposing a plurality of ball bearings and a free cylinder such that the floating plate is movable in longitudinal and transverse directions with respect to the base member, the floating plate having a centering attachment unit mounted thereon;
 - 10 a secondary lift structure mounted to the floating plate, interposing a secondary lift guider and a secondary lift cylinder such that the secondary lift structure is liftable with respect to the floating plate, the secondary lift structure including a sunroof attachment unit and a primary lifting shaft; and
 - 15 a centering cylinder unit disposed between the secondary lift structure and the floating plate, such that the centering cylinder unit aligns the centering attachment unit on the floating plate to a sunroof mounting position on the vehicle body.
2. The apparatus of claim 1, wherein the free cylinder is fixed to the base member and connected at its piston end to a fixing ring such that the free cylinder firmly holds or moves a fixing member projected downward from the floating plate.
- 20 3. The apparatus of claim 1, wherein the primary lifting shaft comprises:
 - a housing vertically mounted to the secondary lift structure interposing a bracket;
 - a rod movably disposed in the housing;
 - 25 a pressuring cap disposed at an upper end of the rod; and
 - a dog disposed at a lower end of the rod.
4. The apparatus of claim 3, further comprising a detection sensor disposed below the dog such that the detection sensor detects a lowering of the dog.
- 30 5. The apparatus of claim 1, wherein:
 - the centering cylinder unit comprises a longitudinal centering cylinder and left and right centering cylinders; and

the centering attachment unit comprises a longitudinal centering attachment member operated by the longitudinal centering cylinder, and left and right centering attachment members respectively operated by the left and right centering cylinders.

- 5 6. An apparatus for positioning a sunroof to a vehicle body, comprising:
 - a base member mounted on a running rail, the base member movable along and vertically to the running rail;
 - a floating plate mounted to the base member, movable in longitudinal and transverse directions with respect thereto, the floating plate having a centering attachment unit mounted thereon;
 - a secondary lift structure mounted to the floating plate, being liftable with respect to the floating plate, the secondary lift structure including a sunroof attachment unit and a primary lifting shaft; and
 - a centering cylinder unit disposed between the secondary lift structure and the floating plate such, that the centering cylinder unit aligns the centering attachment unit on the floating plate to a sunroof mounting position on the vehicle body.
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